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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,931	05/08/2006	Michel Hoclet	MM6010PCT	5153
1109 7590 05/07/2007 ANDERSON, KILL & OLICK, P.C. 1251 AVENUE OF THE AMERICAS NEW YORK,, NY 10020-1182			EXAMINER BENSON, WALTER	
			ART UNIT 2858	PAPER NUMBER
			MAIL DATE 05/07/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/578,931	HOCLET, MICHEL	
	<b>Examiner</b>	<b>Art Unit</b>	
	Walter Benson	2858	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,9 and 10 is/are rejected.
- 7) ☒ Claim(s) 1,3-8 and 11-18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/16/06</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

1. Claims 1-18 are presented for examination.

### ***Specification***

2. The abstract of the disclosure is objected to because it is not in the proper USPTO format.

Correction is required. See MPEP § 608.01(b).

3. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

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- (I) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

4. The disclosure is objected to because of the following informalities:

I. Fig. 1, item 9 and Fig. 5, items 35, 44, 46, do not appear to be described in the disclosure.

Appropriate correction is required.

### ***Claim Objections***

5. Claims 3-8, and 11-18 objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only and cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 3-9 and 11-18 not been further treated on the merits.

6. Claim 1 is objected to because of the following informalities:

i. dash "-" in the elements,

ii. "on the other hand" in lines 12 and 14 is indefinite,

*heading for the claims:*

i. "CLAIMS" should be followed by -I claim/We claim.

. Appropriate correction is required.

*Claim Rejections - 35 USC § 102*

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Mouhasseb (US Patent No. 7,017,396 and Mouhasseb hereinafter).

9. As to claim 1, Mouhasseb discloses a device for ultra-high frequency hydrometric measurements comprising:

electric means capable of generating sine wave trains at frequencies assuming several values in arithmetic progression between a few MHz and a few GHz (col. 4, lines 19-23);

at least one ultra-high frequency cable along which at least two measuring stations (4) are found, each measuring station having a separator device capable of only sampling from the incident wave a portion with sufficient energy so that the measuring cell sends back an echo measurable by electronic read-out means (col.3, lines 11-16)

a measuring cell (14) consisting of a ultra-high frequency line portion (col. 3, lines 62-64);

the distal end of which is terminated by a short circuit, this line portion having an

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external wall either porous or provided with ports, and having its dielectric essentially consisting of a sample of homogeneous dielectric material for which permittivity is a monotonous function of the hydrometry in the relevant measurement domain (col. 3, lines 56-65)

electronic read-out means with which, from signals having traveled through the ultra-high frequency cable, values of the real and imaginary parts of the permittivity may be determined, in order to determine the measurement of humidity and temperature by correlation with tables of values experimentally established beforehand by means of another hydrometric measurement method (col. 3, lines 11-19).

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mouhasseb in view of Misra (US Patent No. 5,233,306 and Misra hereinafter).

Although the system disclosed by Mouhasseb shows substantial features of the claimed invention (discussed in the paragraph above), it fails to disclose:

where the electronic read-out means include means: for digitizing these signals, for filtering them in frequency, for calculating the complex reflection coefficient in the frequency

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domain, for performing a Fourier transform in order to calculate the complex reflection coefficient in the time domain, and then for determining the values of the real and imaginary parts of the permittivity.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Mouhasseb, as evidenced by Misra.

Misra discloses a method and apparatus for determining the permittivity of a sample having:

where the electronic read-out means include means: for digitizing these signals, for filtering them in frequency, for calculating the complex reflection coefficient in the frequency domain, for performing a Fourier transform in order to calculate the complex reflection coefficient in the time domain, and then for determining the values of the real and imaginary parts of the permittivity (col. 11, lines 30-50).

Given the teaching of Misra, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying Mouhasseb by employing the well known or conventional features of data measurement and evaluation, such as disclosed by Misra, in order to efficiently collect data and calculate the complex permittivity in the Mouhasseb device.

12. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mouhasseb in view of Dahan (US Patent No. 7,176,697 and Dahan hereinafter).

Although the system disclosed by Mouhasseb shows substantial features of the claimed invention (discussed in the paragraph above), it fails to disclose:

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where the external wall of the measuring cell is provided with slits directed along the wave propagation vector [claim 9];

.where the external wall of the measuring cell is porous [claim 10].

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Mouhasseb, as evidenced by Dahan.

Dahan discloses a method and apparatus for determining the moisture content of a sample having:

where the external wall of the measuring cell is provided with slits directed along the wave propagation vector [claim 9] (Fig. 1, lines 6-11);

where the external wall of the measuring cell is porous [claim 10] (col. 3, lines 65-67 and col. 4, line 1).

Given the teaching of Dahan, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying Mouhasseb by employing the well known or conventional features of data sensors, such as disclosed by Dahan, in order to efficiently collect data in the Mouhasseb device by use of flexible sensors to measure moisture.

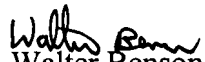
#### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter Benson whose telephone number is (571) 272-2227. The examiner can normally be reached on Mon to Fri 6:30 AM to 4:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Walter Benson  
Primary Examiner

April 30, 2007